

Title (en)

METHOD FOR MOVING A ROTOR IN A PLANAR DRIVE SYSTEM

Title (de)

VERFAHREN ZUM BEWEGEN EINES LÄUFERS IN EINEM PLANARANTRIEBSSYSTEM

Title (fr)

PROCÉDÉ POUR DÉPLACER UN ROTOR DANS UN SYSTÈME D'ENTRAÎNEMENT PLANAIRE

Publication

EP 3818625 A1 20210512 (DE)

Application

EP 20734942 A 20200626

Priority

- DE 102019117430 A 20190627
- EP 2020067998 W 20200626

Abstract (en)

[origin: CA3111010A1] The present invention relates to a method for moving a rotor in a planar drive system, wherein the planar drive system comprises stator modules with a gap between the stator modules, wherein magnetic fields may be generated by the stator modules, wherein the magnetic fields may hold the rotor in a vertical position at a distance from a surface of the stator modules, wherein the magnetic fields have a first magnetic field strength to maintain the rotor in the vertical position, wherein the magnetic fields may further be used to change a horizontal position of the rotor, wherein a first stator module comprises a first close range adjacent to the gap, wherein in the first close range a first magnetic field has a second magnetic field strength when the rotor is moved across the gap, the second magnetic field strength being greater than the first magnetic field strength.

IPC 8 full level

H02K 41/03 (2006.01); **H02P 6/00** (2016.01); **H02P 25/06** (2016.01)

CPC (source: CN EP US)

H02K 11/215 (2016.01 - US); **H02K 16/00** (2013.01 - CN); **H02K 41/02** (2013.01 - CN); **H02K 41/031** (2013.01 - EP US); **H02P 6/006** (2013.01 - EP US); **H02P 6/16** (2013.01 - US); **H02P 25/06** (2013.01 - EP); **H02P 25/064** (2016.02 - US); **H02K 11/21** (2016.01 - EP); **H02K 2201/18** (2013.01 - EP US)

Citation (search report)

See references of WO 2020260564A1

Cited by

EP4375626A1; WO2024110679A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102019117430 A1 20201231; CA 3111010 A1 20201230; CA 3111010 C 20230523; CN 112970179 A 20210615; EP 3818625 A1 20210512; EP 3818625 B1 20230222; US 11552587 B2 20230110; US 2021184612 A1 20210617; WO 2020260564 A1 20201230

DOCDB simple family (application)

DE 102019117430 A 20190627; CA 3111010 A 20200626; CN 202080006017 A 20200626; EP 2020067998 W 20200626; EP 20734942 A 20200626; US 202117175283 A 20210212